XADS/Eurisol Cryomodule - Options for a Highly Reliable Spoke Linac Jean-Luc Biarrotte, CNRS, IPN Orsay

The concept of reliability is a crucial issue for the XADS project, since the accelerator specifications ask for less than 5 beam trips per year. In that sense, CNRS proposed a spoke-based design for the "intermediate section" (5-100 MeV) of the proton linac, trying to take care as much as possible of this high-reliability challenge. In this presentation, a few basic arguments are developed around this item, especially concerning beam dynamics issues and their consequences on the design of such a spoke cryomodule.